

DPM 5541

**TECHNICAL****DATA****BULLETIN NO. 74**

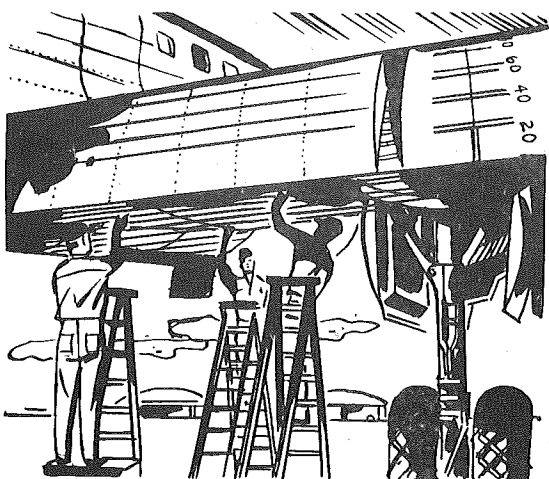
TURCO PRODUCTS • A DIVISION OF PUREX CORPORATION, LTD. • WILMINGTON, CALIFORNIA 90744 • OFFICES IN ALL PRINCIPAL CITIES

# **TURCO® W. O. #1®**

## **Simple, Convenient Prepaint Treatment For AIRCRAFT SURFACES**

### **TOUCH-UP OR REFINISH ENTIRE AIRCRAFT—ANYWHERE**

TURCO W.O. #1 is designed to simplify prepaint treatment of metal aircraft surfaces. Wing sections, fuselages, whole assembled planes can be cleaned and conditioned right out on the field without the use of special equipment. Easy hand application of W.O. #1 . . . by brushing, swabbing, or spraying . . . provides thoroughly clean, passivated surfaces ready for touch-up or complete refinishing.



Large aircraft surfaces quickly, easily cleaned and passivated in field application of W.O. #1

### **FAST, LOW COST METHOD**

Passivating with W.O. #1 is not intended to replace anodizing and chromodizing in aircraft manufacturing. However, it produces similar results faster and at much lower cost where those processes are impractical or unavailable.

### **REMOVES, PREVENTS CORROSION**

Light oxides and corrosion are quickly and easily removed by merely applying TURCO W.O. #1 by hand methods and rinsing with water. Surface is made chemically inert . . . oxide and soil free . . . to prevent corrosion from spreading under paint coatings.

### **CLEANS AND CONDITIONS IN A SINGLE OPERATION**

TURCO W.O. #1 cleans and passivates simultaneously . . . oil, grease, and corrosion come off together.

### **REMOVES EXHAUST STAINS**

Ordinarily hard-to-remove exhaust stains can be

cleaned from the skin of the ship by swabbing or brushing with TURCO W.O. #1.

### **BONDS PAINT PERMANENTLY**

TURCO W.O. #1 produces a toothed, slightly porous surface which absorbs primer, providing a firm base for paint. The passivated surface is not affected by moisture, assuring longer life for aircraft finishes.

### **FIELD APPLICATION OF W.O. #1**

1. Although TURCO W.O. #1 is an excellent remover of light grease and oil, unusually heavy soil contamination should be removed by other means. This can be done quickly and easily with TURCO'S specialized emulsion cleaner for aircraft . . . TURCO Airmulso and solvent. Surface may then be passivated with TURCO W.O. #1 applied at standard strength.
2. W.O. #1 is used in concentrations of 1 part W.O. #1 to 3 parts water. It is applied to corroded areas by brushing, swabbing, or spraying. W.O. #1 works quickly. Within about 5-10 minutes corrosive residues are loosened and may be washed off readily with a clear water rinse. Small parts may be treated by immersion in a vessel containing W.O. #1 solution of recommended strength.

NOTE: Solutions of W.O. #1 should not be used in steel or galvanized containers. Plastic or hard rubber containers are recommended. Do not use on high strength aircraft steel.

# TURCO W.O. #1

## 3 Important Metal Treatments

### 1 Easy Operation

**REMOVES RUST AND STAINS . . . PROVIDES  
SOIL-FREE SURFACE . . . IMPROVES PAINT  
ADHESION**

Light rust and soil come off quickly, thoroughly with easy-to-use TURCO W. O. #1. A single operation cleans and passivates the metal surface . . . provides tighter adhesion . . . more durable rust-proofing. Neutralizing is eliminated. Only a simple water rinse needed before further processing. Precleaning usually unnecessary. TURCO W.O. #1 is applied by brushing, spraying, swabbing, or immersion methods. No special equipment required.

#### **FAST, EFFICIENT RUST REMOVAL**

W.O. #1 attacks and removes rust — not only from metal surfaces but also from screw threads, grooves, and crevices. W.O. #1 contains no abrasives . . . rust disappears without sanding or scouring.

#### **MINIMIZES PRECLEANING**

Unless work is heavily soiled, pre-cleaning is not required. The wetting, penetrating, and non-abrasive cleaning agents in W.O. #1 combine to provide thorough removal of light oils, grease, and dirt. Fingerprints and other almost invisible soils which interfere with paint adhesion are washed away.

#### **NO NEUTRALIZING TREATMENT REQUIRED**

TURCO W.O. #1 leaves a chemically inert surface which requires no neutralizing. No corrosive residues remain to damage metal. Only a simple water rinse is needed before painting.

#### **FOR FERROUS AND NON-FERROUS METALS**

Exhaust and chemical stains, oxides, and corrosion are easily and safely removed from aluminum, zinc, and cadmium plate as well as iron and steel.

#### **EASY TO USE . . . HAS LONG TANK LIFE**

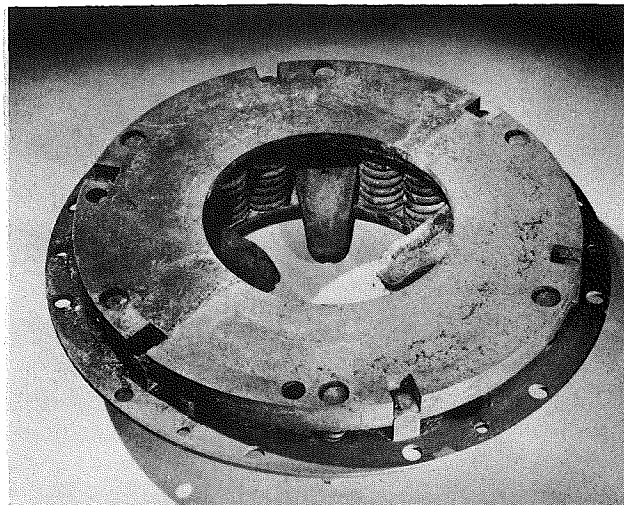
TURCO W.O. #1 is a clear, pleasant-smelling liquid . . . easy to use when normal precautions are observed. For an extra margin of safety use of rubber gloves is recommended. W.O. #1 does not settle out or separate into layers, thus assuring long life in storage.

#### **HOW TO USE W.O. #1**

TURCO W.O. #1 is applied by brushing, swabbing, spraying or immersion. A standard solution of one part W.O. #1 to three parts of water gives excellent results in any of these methods. However, this standard solution may be decreased or increased to meet individual job requirements.

**CAUTION:** Contains mildly acidic ingredients. Avoid contact with skin, eyes and clothing. Refer to product labels for additional precautionary and handling information.

The information and recommendations of Turco concerning these products are based upon our laboratory tests and field use experience, and to the best of our knowledge and belief are true and accurate. Since conditions of actual use are beyond our control, any recommendations or suggestions are made without warranty, express or implied.



Upper section of photo before W. O. #1 treatment. Lower section after W. O. #1 treatment.

#### **IMMERSION METHOD**

Immerse work in a hot or cold solution of W.O. #1 until all rust has been removed (solutions may be heated safely to 140° F.). Rinse in clear water, then dry thoroughly. A hot water rinse is recommended for speedier drying. Wooden, crockery, hard-rubber, lead-lined steel, or stainless steel tanks and containers may be employed. Containers lined with certain plastics are also practical.

#### **BRUSHING AND SWABBING**

Dip the brush or cloth in W.O. #1 solution. Apply to rusted area. Vigorous scrubbing speeds up soil removal. If rust is fairly heavy, dip cloth or brush in fresh solution frequently to maintain energy of derusting action. Rinse and dry as recommended for tank immersion processing.

#### **SPRAYING**

Spray W.O. #1 solution on surface and let stand until oxide film is dissolved. Keep surface wet with solution. Brush surface just before rinsing.

#### **RUSTPROOFING TREATMENT**

To prevent further rusting, paint, primer or a reliable rustproofing compound should be applied as soon as practical after all rust has been removed with W.O. #1. TURCO Rust-Bloc #30, or TURCO 4454 and TURCO Aquasorb are recommended for rustproofing procedures. Parts should be dried thoroughly before applying rustproofing compound, except when TURCO Aquasorb or TURCO 4454 are used.

*(These materials may be applied to wet surfaces.)*